

### REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-26 are presently active in this case, Claims 1, 14 and 15 amended by way of the present amendment.

In the outstanding Office Action, Claims 1-11 and 13-26 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication 2005/0185651 to Rinne; and Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Rinne.

First, Applicants respectfully request that the final rejection be withdrawn so that the issues in this case can be clearly developed to the extent that Applicants can judge the advisability of an appeal. MPEP (The Manual of Patent Examining Procedure) §706.07 states:

Before final rejection is in order ***a clear issue should be developed*** between the examiner and applicant...

...In making the final rejection, all outstanding grounds of rejection of record should be carefully reviewed, and any such grounds relied on in the final rejection should be reiterated. ***They must also be clearly developed to such an extent that applicant may readily judge the advisability of an appeal*** unless a single previous Office action contains a complete statement supporting the rejection.

...However, where a single previous Office action contains a complete statement of a ground of rejection, the final rejection may refer to such a statement and ***also should include a rebuttal of any arguments raised in the applicant's reply***. If appeal is taken in such a case, the examiner's answer should contain a complete statement of the examiner's position.

Thus, The MPEP makes clear that a final rejection should clearly develop the grounds for rejection, which includes providing a rebuttal of Applicants' arguments presented in the previous reply. This is why a final rejection that repeats a previous grounds for rejection includes a "Response to Arguments" portion to address Applicants' previous arguments.

The outstanding Office Action states “Applicant’s arguments ... have been considered, but are moot in view of the new grounds for rejection. ...Applicant’s amendment necessitated the new grounds of rejection presented in this Office Action.”<sup>1</sup> However, the Office Action does *not* include a new grounds of rejection, but rather *simply repeats the rejection included in the previous office action without any rebuttal of Applicant’s arguments presented in the Amendment filed August 8, 2008*. Therefore, Applicants respectfully submit that the outstanding rejection was prematurely made final, and finality of the rejection should be withdrawn and the present amendment entered so that the issues can be fully developed in accordance with the procedures outlined in MPEP §706.07.

Turning now to the merits, in order to expedite issuance of a patent in this case, Applicants have amended Claims 1, 14 and 15 to clarify the patentable features of the present invention over the cited references. As discussed in the response filed August 8, 2007, Applicants’ specification makes clear that the “request value for communication quality” is different from QoS class classified according to traffic characteristics.<sup>2</sup> For example, Figure 1 shows a plurality of mobile stations 20a-20e, wherein the mobile station 20a includes both a request value for quality as “transfer speed 1 Mbps” plus a QoS class Diffserv EF. The mobile station 20c includes only a request value for quality of “transfer speed 32 kbps”, and mobile station 20b and 20e include only QoS classes. These examples demonstrate that the quantitative guarantee type mobile station includes specific quantitative guarantees, which is different from a conventional QoS class classified according to traffic characteristics. Applicants amended claims clarify this difference.

Specifically, amended Claims 1, 14 and 15 recite classifying packets related to a plurality of mobile stations into a “quantitative guarantee type packet having a request value that indicates quantitative value for communication quality, or a relative guarantee type

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<sup>1</sup> Office Action at page 2, “Response to Arguments” and page 9, “Conclusion.”

<sup>2</sup> See Applicants’ published specification at paragraphs 35 and 36.

packet *not having* the request value that indicates quantitative value for communication quality, according to QoS class of each packet.” Thus, the independent claims have been amended to clarify that a “request value” is included in the quantitative guarantee type packet, but not included in the relative guarantee type packet which is based on QoS class. That is, the claimed “request value” is different from the conventional “QoS classes.” This technical feature of the claimed invention makes it possible to perform not only the scheduling of packet transmission order based on predetermined QoS classes in the radio communications systems, but also detailed scheduling of packet transmission order based on any specific request value for communication quality from a plurality of mobile stations.

In contrast, the cited reference to Rinne discloses a system including a QoS classifier 16 configured to classify packets into five different QoS classes according to predetermined traffic field (1-255) in radio communication systems.<sup>3</sup> However, as discussed in the August 8<sup>th</sup> response, Rinne discloses providing communication transmission based only on QoS classes, without any indication of quantitative guarantee type request values for communication quality. Accordingly, Rinne fails to disclose “quantitative guarantee type packet having a request value that indicates quantitative value for communication quality, or a relative guarantee type packet not having the request value that indicates quantitative value for communication quality, according to QoS class of each packet,” as now recited in the independent claims.

The outstanding Office Action again cites paragraph [0068] of Rinne as teaching both classifying packets into quantitative guarantee type packets having a request value for communication quality and a relative guarantee packet not having a request value for communication quality. However, the Office Action provides no rebuttal of Applicants position on this point. As noted in the previous response, paragraph 68 discusses Figure 5 and

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<sup>3</sup> Rinne at page 4, paragraph 68.

describes only QoS mapping of IP packets to a radio interface. As seen in Figure 5, different data flows are provided to the QoS classifier where they are classified according to different QoS classes. Paragraphs 69-74 provide a range of traffic class indicators, but do not disclose any specific quantitative guarantee values. Rinne simply does not disclose differentiating between quantitative guarantee type packets and relative guarantee type packets, and classifying them. Applicants respectfully request that any forthcoming Office Action explain how paragraph 68 or any other portion of Rinne teaches this feature as now clearly covered by amended Claims 1, 14 and 15.

For the reasons discussed above, Applicants' independent Claims 1, 14 and 15 patentably define over the cited reference to Rinne. Further, as Claims 2-13 depend from Claim 1, these claims also patentably define over the cited reference to Rinne. Nevertheless, dependent Claims 16-20 include language for further specifying the quantitative guarantee type packet. Specifically, Claims 16, 18 and 20 specify that the quantitative guarantee type packet has a request value for a communication quality that is not a QoS class, and Claims 17 and 19 specify that the quantitative guarantee type packet has a request value for at least one of a specific quantity of transfer speed, transfer delay or jitter. The Office Action again cites paragraph 68 of Rinne as teaching these features. As noted above, however, this portion of Rinne does not disclose differentiating between quantitative guarantee type packets and relative guarantee type packets, and classifying them. Therefore, Applicants' Claims 16-20 provide further basis for patentability over Rinne.

Further, dependent Claims 21, 23 and 25 recite that if radio resources remain after assignment to the quantitative guarantee type packet in accordance with the request value, the remaining radio resources are assigned to the relative guarantee type packets by the transmission order controller, and Claims 22, 24 and 26 recite that if radio resources still remain after assigned to the relative guarantee type packets, the further remaining radio

resources are assigned to the remaining quantitative guarantee type packets. The Office Action cites paragraph 85 of Rinne as teaching all of these features. However, this portion of Rinne generally discloses QoS scheduler operation according to QoS classes. As Rinne discloses providing communication transmission based only on QoS classes, without any indication of quantitative guarantee type request values for communication quality, Claims 21-26 also provide further basis for patentability over Rinne.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application and the present application is believed to be in condition for formal allowance. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Bradley D. Lytle  
Attorney of Record  
Registration No. 40,073

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 03/06)

Edwin D. Garlepp  
Registration No. 45,330